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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,731	07/25/2001	Tatsuya Kawahara	77661/54	5591
23838	7590	05/20/2004	EXAMINER	
KENYON & KENYON 1500 K STREET, N.W., SUITE 700 WASHINGTON, DC 20005			CREPEAU, JONATHAN	
			ART UNIT	PAPER NUMBER

1746

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/911,731

Applicant(s)

KAWAHARA ET AL.

Examiner

Jonathan S. Crepeau

Art Unit

1746

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 10 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☒ Applicant's reply has overcome the following rejection(s): §102 rejection of claims 1 and 3 over WO '958.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

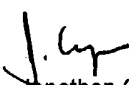
Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-3 and 6-11.

Claim(s) withdrawn from consideration: _____

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other: _____


Jonathan Crepeau
Patent Examiner
Art Unit: 1746

Continuation of 5. does NOT place the application in condition for allowance because: Applicant's arguments regarding the Wilkinson reference have been considered, but they are not persuasive in distinguishing amended claim 1 over the reference. Applicants assert that "claim 1 as amended explicitly recites a catalyst layer of a non-uniform thickness." However, this limitation is only one of a number of alternatives specified by claim 1. Thus, this limitation does not have to be present in the reference. Additionally, the Examiner maintains the position that the disclosure of a variable "catalyst loading" of Wilkinson would lead the artisan to a conclusion of a variable porosity in the catalyst layer. As is known to the artisan, the "catalyst loading" refers to the amount (i.e., mass) of catalyst per unit area of surface. Given a constant layer thickness, a variable catalyst loading would contain varying amounts of catalyst material, and therefore would have a variable density. Hence, the pore volume and/or pore size between the catalyst particles would also vary. Additionally, as previously set forth, the gas diffusion layer of the reference is disclosed as having an increasing porosity/pore size (see claims 9 and 10 of the reference). The artisan would be motivated to adjust the catalyst loading (and thus the porosity) of the catalyst layer to mirror the porosity of the diffusion (substrate) layer so as to not offset the effects resulting from the increasing porosity in the diffusion layer. As such, the recitations of a small porosity upstream and a large porosity downstream in instant claim 1 are not considered to distinguish over the reference.